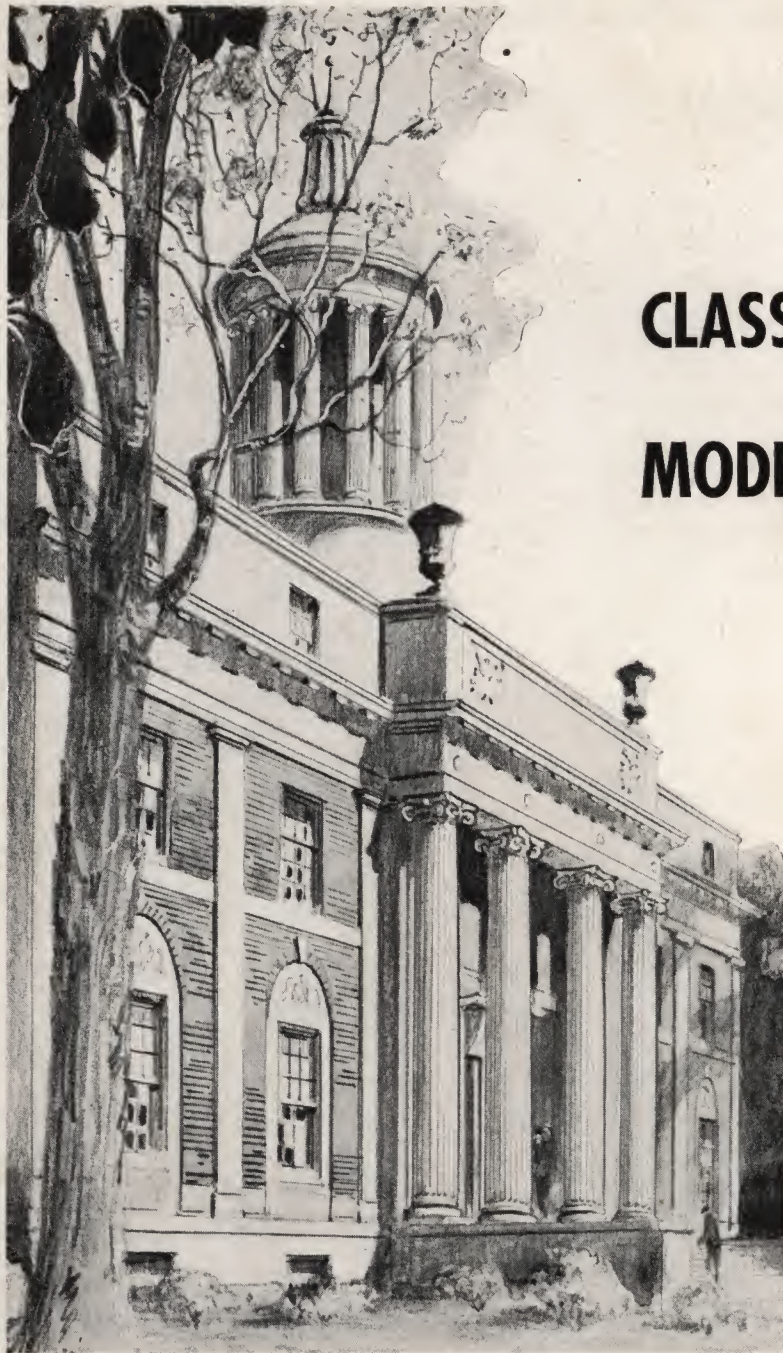


AIA - FILE No. 12M - 1936



**CLASSICAL COLUMNS**  
FOR  
**MODERN BUILDINGS**

CATALOG No. 50-H

**THE UNION METAL MANUFACTURING CO.**

★ CANTON, OHIO ★

AIA - FILE No. 12M - 1936

*H. C. ... ..*



## ANCIENT BEAUTY FOR MODERN BUILDINGS

The glory of Greek and Roman architecture and the crowning beauty of homes and public buildings in our own Colonial period were made possible by the tasteful and generous use of classical columns.

For thousands of years the world's most famous architects and designers have found nothing so beautiful and worthy in building as the simple, classical column. The beauty of these fluted columns has been made available for use on every kind of structure from the modest cottage to large public buildings, by the Union Metal principle of pressed steel column construction.

## BEAUTY THAT LASTS A LIFETIME

Beautiful columns on a building are the first feature to catch the eye and the one that is longest remembered. How important, then, that they should be made of enduring material that will not split, rot, nor open at the joints and thus mar the entire structure. The beauty of Union Metal Columns is more than skin deep. Under the paint is a permanent metal shaft that will be just as sound and beautiful in ten, twenty—yes, thirty years—as it was the day the columns were put in place.

★ ★

Many architects who fully appreciate the architectural value of columns have not used them freely in their work because of the practical difficulties in obtaining columns correct in design, permanent in construction and reasonable in cost. These three limitations are removed by Union Metal Columns — “The Ones That Last a Lifetime”.

In using them, architects, contractors and owners realize that their work will be protected against the disfiguring effects of time and that the columns, the principal decorative feature of the building, will be as permanent and durable as the brick in the walls.

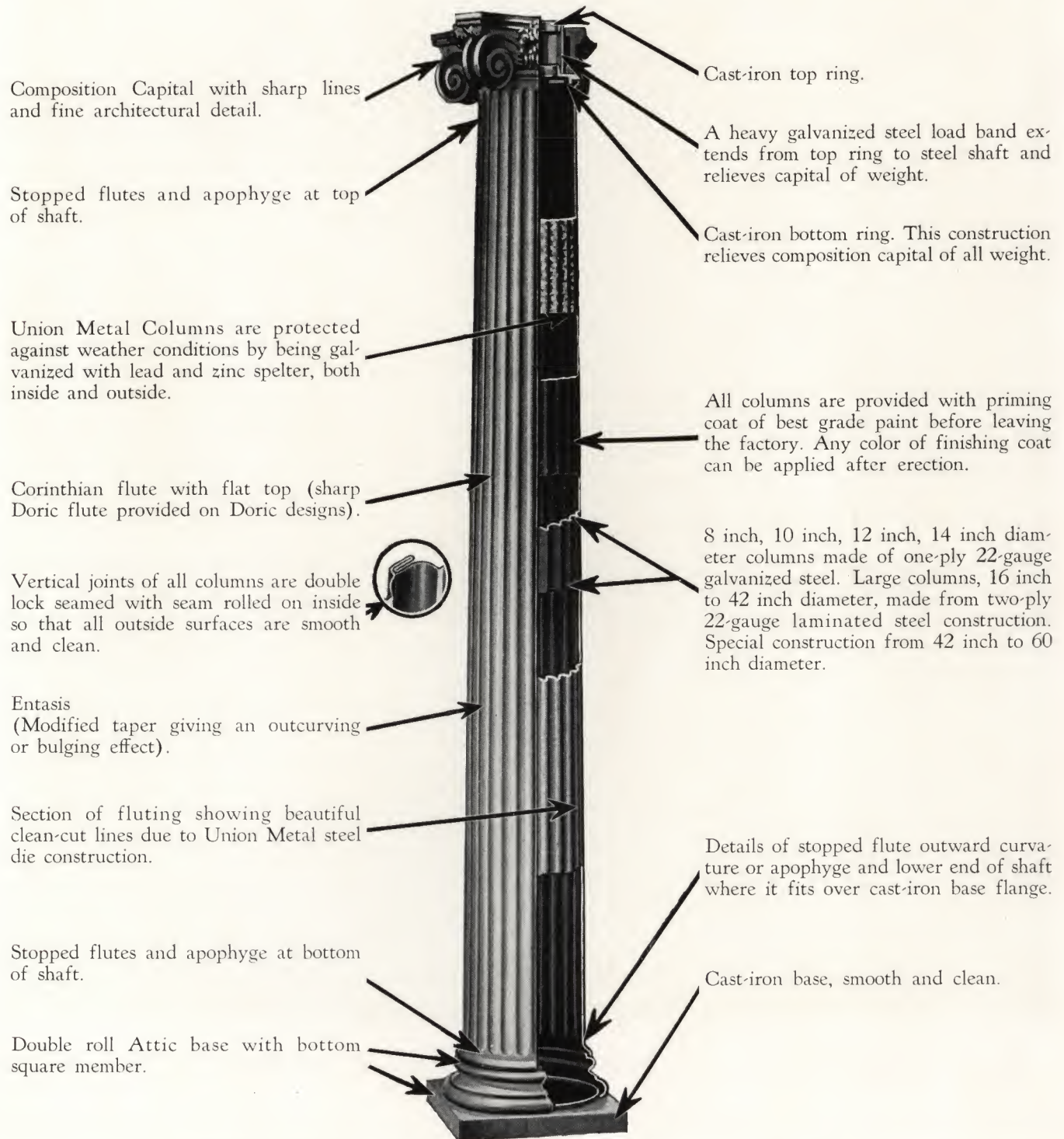
## PRACTICAL ADVANTAGES of UNION METAL COLUMNS

### TO ARCHITECTS . . . CONTRACTORS OWNERS

1. Union Metal Columns are made from enduring, copper-bearing, galvanized steel. They are protected against all conditions of weather and last a lifetime.
  2. They are architecturally correct, made in nine styles, conforming to the different orders of Grecian and Roman architecture and in two modified designs. There is a design for the modest cottage or the most elaborate public building.
  3. They are unquestionably the only type of inexpensive column that should ever be considered, because they will not split, rot, warp or open at joints as all wood columns do.
  4. They are absolutely fireproof. They can be shipped and hauled to locations and under conditions where wood columns would rack to pieces and where handling cost of stone would be prohibitive.
  5. Ordinary bumps, blows and rough treatment that would dent wood and chip stone columns beyond repair have no effect upon these sturdy pressed steel columns. Union Metal Columns will stand more abuse than other types of columns.
  6. Columns with 8, 10, 12, 14 inch diameters are made from one ply 22 gauge copper-bearing galvanized steel.
- Columns with 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 42 inch diameters are made from two ply 22 gauge laminated steel construction. Larger than 36 inch columns made in special construction.



## Architectural and Construction Details of Union Metal Columns





**Design No. 212, Roman Corinthian, Com-**  
position Capital, Attic Base (Cast Iron).  
Steel Shaft (Cor. Flute).

**Design No. 230, Greek Ionic (Erechtheum).**  
Composition Capital, Attic Base (Cast Iron).  
Steel Shaft (Cor. Flute).

**Design No. 237, Modern Ionic.** Composition  
Capital, Attic Base (Cast Iron). Steel Shaft  
(Cor. Flute).

*Dimension Specifications given on Pages 8 and 9*

Union Metal Columns (except Designs 240 and 260) are made in all sizes from 8 inch to 42 inch diameters and from 5 feet to 35 feet high.  
Columns with diameter greater than 42 inches and higher than 35 feet are made in special construction.





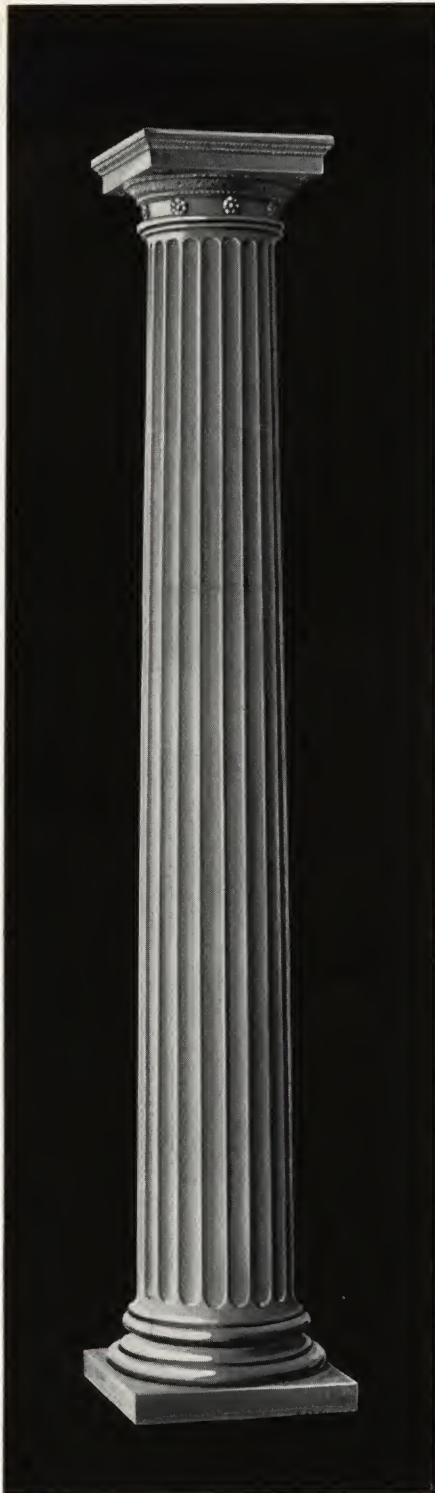
Design No. 222, Italian Renaissance Ionic (Scamozzi). Composition Capital, Attic Base (Cast Iron). Steel Shaft (Cor. Flute).

Design No. 213, Temple of the Winds. Corinthian Composition Capital, Attic Base (Cast Iron). Steel Shaft (Cor. Flute).

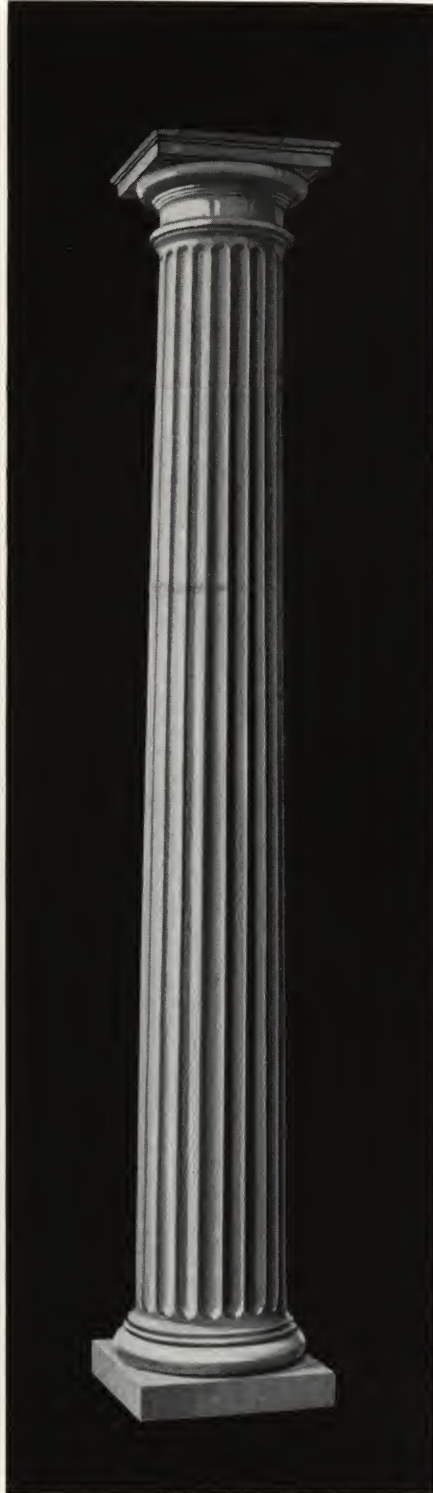
Design No. 219, Italian Composite. Composition Capital, Attic Base (Cast Iron). Steel Shaft (Cor. Flute).

*Dimension Specifications given on Pages 8 and 9*

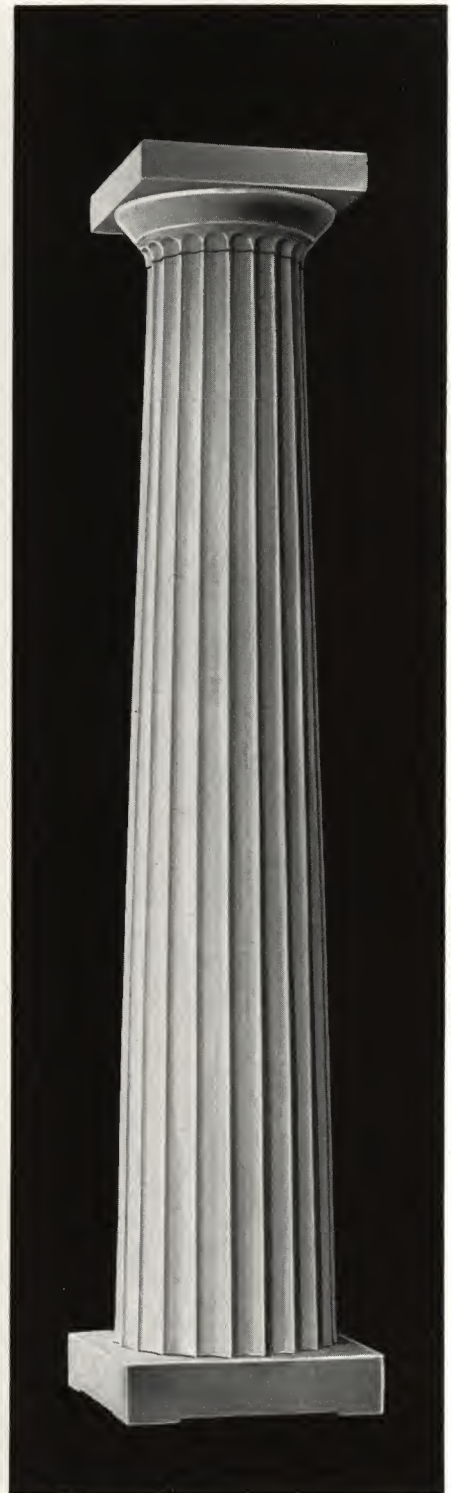
Union Metal Columns (except Designs 240 and 260) are made in all sizes from 8 inch to 42 inch diameters and from 5 feet to 35 feet high. Columns with diameter greater than 42 inches and higher than 35 feet are made in special construction.



Design No. 224, Roman Doric (Diocletian)  
Composition Capital, Attic Base (Cast Iron),  
Steel Shaft (Doric Flute).



Design No. 246, True Roman Doric. Cast  
Iron Capital, and Cast Iron Base. Steel  
Shaft (Doric Flute).



Design No. 700, Greek Doric. Capital in-  
cluding Top Square (Cast Iron). Square Base  
Member (Cast Iron). Steel Shaft (Doric Flute).

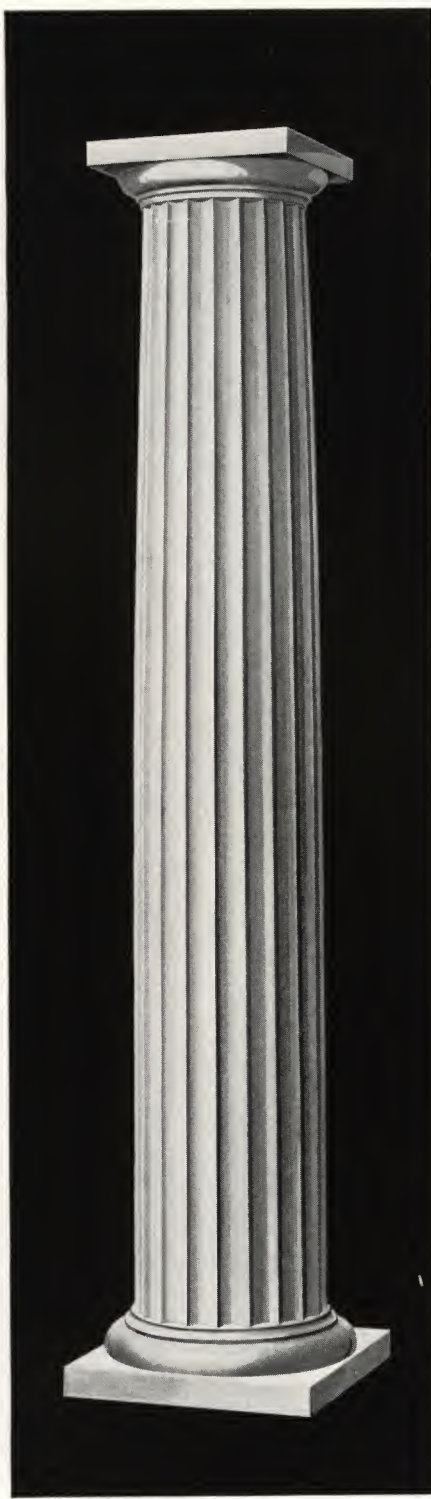
*Dimension Specifications given on Pages 8 and 9*

Union Metal Columns (except Designs 240 and 260) are made in all sizes from 8 inch to 42 inch diameters and from 5 feet to 35 feet high. Columns with diameter greater than 42 inches and higher than 35 feet are made in special construction.





Design No. 240, Modern, Steel Doric. (Doric Flute). Design 240 furnished at very reasonable prices in stock sizes only:—8-10-12-14 inch diameters and heights of 5 feet to 14 ft. 6" overall in fractional parts of an inch.



Design No. 260. An inexpensive column furnished in stock sizes only. Heights 6' to 10', diameters 6½", 8", 10" and 12". Can be adjusted to height on job.

## Designs No. 240 and 260

In column No. 240, the complete capital and roll member of base are made of No. 16 gauge steel, while the fluted shaft is made of No. 22 gauge steel. The square base member is cast iron.

Design No. 260 is composed of a fluted steel shaft, and cast iron base and capital. This column is furnished only in stock sizes, but as much as 12 inches can be cut off the bottom of the fluted steel shaft by the contractor to make the column the exact height required. Although these two designs do not conform strictly to the classical orders, they are extremely popular due to their simplicity and low price.

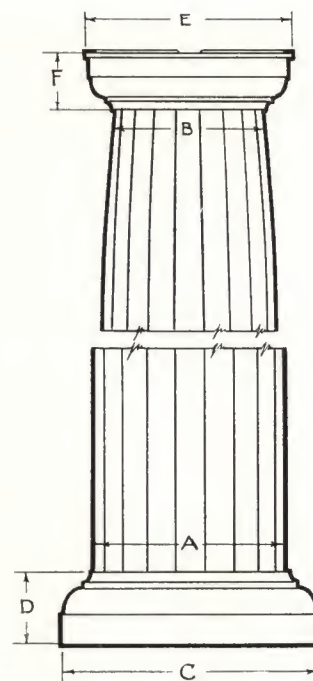
## Architects' Specification Covering Union Metal Columns

The fluted columns used in this building shall be Union Metal Pressed Steel Columns with entasis and stopped flutes, manufactured by The Union Metal Manufacturing Company, Canton, Ohio. The design number, style and size of columns to be used are indicated on drawings. The manufacturer shall apply a priming coat of high grade metallic paint to all columns before shipment from his plant.

## Dimension Chart for Design No. 260

Bottom Diam. Shaft	A	B	C	D	E	F
6½"	6½	5	8⅝	2⅞	6⅝	1⅞
8"	8	6½	10⅞	3	8⅝	2⅞
10"	10	8	13¼	3¾	10⅞	3
12"	12	10	15⅞	4½	13¼	3¾

For further information on Column Design No. 260 see page 7.



Drawing of Design No. 260.

## Load Bearing Formulae

(Result of tests made by Robt. W. Hunt & Co.)

### Design Nos. 240, 246, 212, 213, 219, 224, 230, 237 and 222.

1 ply 22 gauge shaft.

460 x top diameter in inches equals pounds dead load.

2 ply 22 gauge shaft.

860 x top diameter in inches equals pounds dead load.

Example: 12" dia. column tapering to 10" top dia. 1 ply shaft:  $460 \times 10 = 4600$  lbs. dead load. 2 ply shaft:  $860 \times 10 = 8600$  lbs. dead load.

Note: When designs using composition caps are ordered and are expected to carry an unusually heavy weight, this should be explained to us so that a heavier core band than ordinarily furnished will be supplied for inside the cap.

### Design No. 700 and No. 260

1 ply 22 gauge shaft.

1250 x top diameter in inches equals pounds dead load.

2 ply 22 gauge shaft.

2000 x top diameter in inches equals pounds dead load.

Example: No. 700 column, 12" tapering to 9" top dia.

1 ply shaft:  $1,250 \times 9 = 11,250$  lbs. dead load.

2 ply shaft:  $2,000 \times 9 = 18,000$  lbs. dead load.

No. 260 column, 12" tapering to 10" top dia.

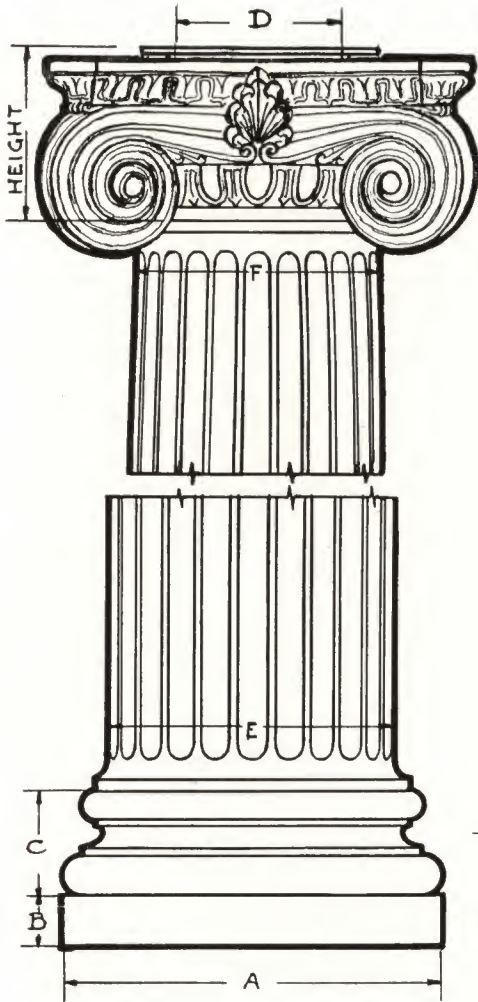
1 ply shaft:  $1,250 \times 10 = 12,500$  lbs. dead load.

2 ply shaft:  $2,000 \times 10 = 20,000$  lbs. dead load.

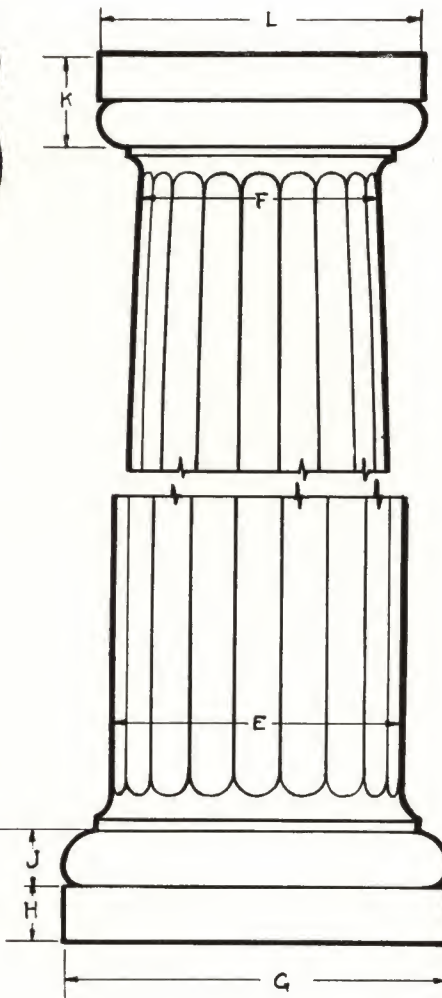
A safety factor of 2 is recommended.

Standard practice is to furnish columns up to and including 14" diameter with 1 ply shaft, but when desired, 2 ply can be furnished at an increase in price. All columns larger than 14" diameter are furnished 2 ply, 22 gauge shaft.

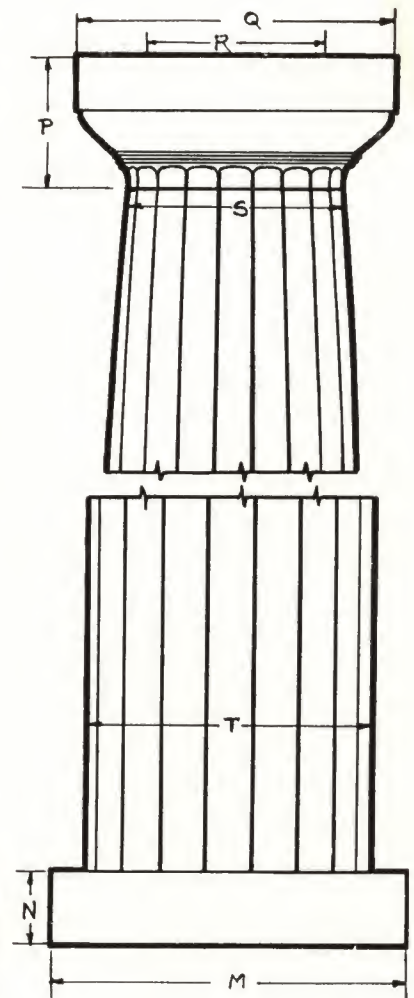




Drawing of all designs using Composition Capitals: 212-230-237-222-213-219 with Corinthian flutes and 224 with Doric flutes.



Drawing of Design 240. Modern all-steel Doric.  
This column is similar to Roman Doric Design No. 246 shown on page 6 and dimensions of which are given on chart below.



Drawing of Design 700 Greek Doric.

## DIMENSION CHART FOR UNION METAL COLUMNS

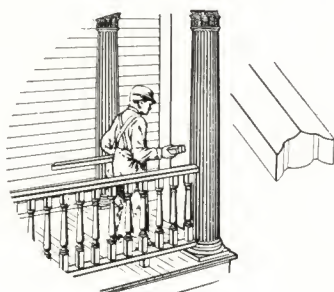
Bott. dia. shaft	Designs No. 212, 230, 237, 222, 213, 219 and 224											Design No. 240					Design No. 246					Design No. 700								
	A	B	C	D	E	F	Height of Capital						G	H	J	K	L	G	H	J	K	L	R	M	N	P	Q	R	S	T
							212	230	237	222	213	219																		
8	10 <sup>5</sup> / <sub>8</sub>	1 <sup>5</sup> / <sub>16</sub>	3	3 <sup>1</sup> / <sub>2</sub>	8	6 <sup>1</sup> / <sub>2</sub>	97 <sup>7</sup> / <sub>8</sub>	61 <sup>1</sup> / <sub>8</sub>	41 <sup>1</sup> / <sub>8</sub>	41 <sup>1</sup> / <sub>8</sub>	87 <sup>7</sup> / <sub>8</sub>	111 <sup>1</sup> / <sub>8</sub>	44 <sup>1</sup> / <sub>8</sub>	11	19 <sup>1</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>2</sub>	21 <sup>1</sup> / <sub>2</sub>	8 <sup>5</sup> / <sub>8</sub>	109 <sup>1</sup> / <sub>16</sub>	11 <sup>15</sup> / <sub>16</sub>	1 <sup>15</sup> / <sub>16</sub>	43 <sup>3</sup> / <sub>8</sub>	9 <sup>3</sup> / <sub>4</sub>	5	121 <sup>1</sup> / <sub>4</sub>	21 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	10
10	13 <sup>15</sup> / <sub>16</sub>	1 <sup>15</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub>	9 <sup>3</sup> / <sub>4</sub>	8	131 <sup>15</sup> / <sub>16</sub>	91 <sup>15</sup> / <sub>16</sub>	67 <sup>15</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>8</sub>	129 <sup>15</sup> / <sub>16</sub>	135 <sup>15</sup> / <sub>16</sub>	61 <sup>15</sup> / <sub>16</sub>	13 <sup>1</sup> / <sub>4</sub>	11 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>2</sub>	21 <sup>1</sup> / <sub>2</sub>	8 <sup>5</sup> / <sub>8</sub>	131 <sup>15</sup> / <sub>16</sub>	21 <sup>15</sup> / <sub>16</sub>	2 <sup>15</sup> / <sub>16</sub>	57 <sup>15</sup> / <sub>16</sub>	12	6 <sup>1</sup> / <sub>4</sub>	121 <sup>1</sup> / <sub>4</sub>	21 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	12
12	16	1 <sup>15</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>8</sub>	12	10	151 <sup>15</sup> / <sub>16</sub>	111 <sup>15</sup> / <sub>16</sub>	87 <sup>15</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>8</sub>	159 <sup>15</sup> / <sub>16</sub>	159 <sup>15</sup> / <sub>16</sub>	7 <sup>15</sup> / <sub>8</sub>	16	11 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>2</sub>	21 <sup>1</sup> / <sub>2</sub>	8 <sup>5</sup> / <sub>8</sub>	151 <sup>15</sup> / <sub>16</sub>	21 <sup>15</sup> / <sub>16</sub>	2 <sup>15</sup> / <sub>16</sub>	61 <sup>15</sup> / <sub>16</sub>	14 <sup>1</sup> / <sub>2</sub>	8	149 <sup>15</sup> / <sub>16</sub>	21 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	14
14	18 <sup>5</sup> / <sub>8</sub>	2 <sup>15</sup> / <sub>16</sub>	4 <sup>3</sup> / <sub>4</sub>	8 <sup>3</sup> / <sub>4</sub>	14	12	161 <sup>15</sup> / <sub>16</sub>	131 <sup>15</sup> / <sub>16</sub>	7 <sup>15</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>4</sub>	161 <sup>15</sup> / <sub>16</sub>	191 <sup>15</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>4</sub>	18 <sup>5</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	21 <sup>1</sup> / <sub>2</sub>	8 <sup>5</sup> / <sub>8</sub>	181 <sup>15</sup> / <sub>16</sub>	21 <sup>15</sup> / <sub>16</sub>	2 <sup>15</sup> / <sub>16</sub>	61 <sup>15</sup> / <sub>16</sub>	16 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	169 <sup>15</sup> / <sub>16</sub>	21 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	16
16	20 <sup>5</sup> / <sub>8</sub>	2 <sup>15</sup> / <sub>16</sub>	5 <sup>1</sup> / <sub>2</sub>	10	15 <sup>3</sup> / <sub>4</sub>	14	181 <sup>15</sup> / <sub>16</sub>	153 <sup>15</sup> / <sub>16</sub>	10	8	211 <sup>15</sup> / <sub>16</sub>	221 <sup>15</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>2</sub>	20 <sup>15</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	21 <sup>1</sup> / <sub>2</sub>	8 <sup>5</sup> / <sub>8</sub>	201 <sup>15</sup> / <sub>16</sub>	21 <sup>15</sup> / <sub>16</sub>	2 <sup>15</sup> / <sub>16</sub>	61 <sup>15</sup> / <sub>16</sub>	16 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	169 <sup>15</sup> / <sub>16</sub>	21 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	18
18	22 <sup>15</sup> / <sub>16</sub>	2 <sup>15</sup> / <sub>16</sub>	5 <sup>1</sup> / <sub>2</sub>	10	17 <sup>3</sup> / <sub>8</sub>	14	181 <sup>15</sup> / <sub>16</sub>	153 <sup>15</sup> / <sub>16</sub>	10	8	211 <sup>15</sup> / <sub>16</sub>	221 <sup>15</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>2</sub>	20 <sup>15</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	21 <sup>1</sup> / <sub>2</sub>	8 <sup>5</sup> / <sub>8</sub>	221 <sup>15</sup> / <sub>16</sub>	21 <sup>15</sup> / <sub>16</sub>	2 <sup>15</sup> / <sub>16</sub>	61 <sup>15</sup> / <sub>16</sub>	16 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	169 <sup>15</sup> / <sub>16</sub>	21 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	20
20	25 <sup>7</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>4</sub>	12 <sup>1</sup> / <sub>2</sub>	19 <sup>1</sup> / <sub>2</sub>	15 <sup>3</sup> / <sub>4</sub>	241 <sup>15</sup> / <sub>16</sub>	171 <sup>15</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>4</sub>	201 <sup>15</sup> / <sub>16</sub>	241 <sup>15</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>2</sub>	22 <sup>7</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>	21 <sup>1</sup> / <sub>2</sub>	8 <sup>5</sup> / <sub>8</sub>	241 <sup>15</sup> / <sub>16</sub>	21 <sup>15</sup> / <sub>16</sub>	2 <sup>15</sup> / <sub>16</sub>	61 <sup>15</sup> / <sub>16</sub>	16 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	169 <sup>15</sup> / <sub>16</sub>	21 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	22
22	28 <sup>3</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>4</sub>	14	19 <sup>1</sup> / <sub>2</sub>	15 <sup>3</sup> / <sub>4</sub>	261 <sup>15</sup> / <sub>16</sub>	171 <sup>15</sup> / <sub>16</sub>	12 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>4</sub>	201 <sup>15</sup> / <sub>16</sub>	241 <sup>15</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>2</sub>	25 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>	21 <sup>1</sup> / <sub>2</sub>	8 <sup>5</sup> / <sub>8</sub>	251 <sup>15</sup> / <sub>16</sub>	21 <sup>15</sup> / <sub>16</sub>	2 <sup>15</sup> / <sub>16</sub>	61 <sup>15</sup> / <sub>16</sub>	16 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	169 <sup>15</sup> / <sub>16</sub>	21 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	24
24	32	4	6 <sup>1</sup> / <sub>4</sub>	15 <sup>1</sup> / <sub>2</sub>	23 <sup>1</sup> / <sub>2</sub>	19 <sup>1</sup> / <sub>2</sub>	291 <sup>15</sup> / <sub>16</sub>	201 <sup>15</sup> / <sub>16</sub>	12 <sup>1</sup> / <sub>2</sub>	10 <sup>1</sup> / <sub>4</sub>	201 <sup>15</sup> / <sub>16</sub>	241 <sup>15</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>2</sub>	29	5 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	21 <sup>1</sup> / <sub>2</sub>	8 <sup>5</sup> / <sub>8</sub>	291 <sup>15</sup> / <sub>16</sub>	21 <sup>15</sup> / <sub>16</sub>	2 <sup>15</sup> / <sub>16</sub>	61 <sup>15</sup> / <sub>16</sub>	16 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	169 <sup>15</sup> / <sub>16</sub>	21 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	26
26	34 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	7 <sup>1</sup> / <sub>16</sub>	15 <sup>1</sup> / <sub>2</sub>	25	19 <sup>1</sup> / <sub>2</sub>	291 <sup>15</sup> / <sub>16</sub>	201 <sup>15</sup> / <sub>16</sub>	12 <sup>1</sup> / <sub>2</sub>	10 <sup>1</sup> / <sub>4</sub>	201 <sup>15</sup> / <sub>16</sub>	241 <sup>15</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>2</sub>	33	6	6	21 <sup>1</sup> / <sub>2</sub>	8 <sup>5</sup> / <sub>8</sub>	321 <sup>15</sup> / <sub>16</sub>	21 <sup>15</sup> / <sub>16</sub>	2 <sup>15</sup> / <sub>16</sub>	61 <sup>15</sup> / <sub>16</sub>	16 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	169 <sup>15</sup> / <sub>16</sub>	21 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	28
28	37	5 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>16</sub>	17	25	22	321 <sup>15</sup> / <sub>16</sub>	211 <sup>15</sup> / <sub>16</sub>	12 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>4</sub>	201 <sup>15</sup> / <sub>16</sub>	241 <sup>15</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>2</sub>	35 <sup>1</sup> / <sub>2</sub>	7	7	21 <sup>1</sup> / <sub>2</sub>	8 <sup>5</sup> / <sub>8</sub>	351 <sup>15</sup> / <sub>16</sub>	21 <sup>15</sup> / <sub>16</sub>	2 <sup>15</sup> / <sub>16</sub>	61 <sup>15</sup> / <sub>16</sub>	16 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	169 <sup>15</sup> / <sub>16</sub>	21 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	30
30	39	5 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>16</sub>	18 <sup>3</sup> / <sub>4</sub>	26 <sup>7</sup> / <sub>8</sub>	23 <sup>1</sup> / <sub>2</sub>	351 <sup>15</sup> / <sub>16</sub>	231 <sup>15</sup> / <sub>16</sub>	12 <sup>1</sup> / <sub>2</sub>	12 <sup>1</sup> / <sub>4</sub>	201 <sup>15</sup> / <sub>16</sub>	241 <sup>15</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>2</sub>	37	7 <sup>1</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>16</sub>	21 <sup>1</sup> / <sub>2</sub>	8 <sup>5</sup> / <sub>8</sub>	371 <sup>15</sup> / <sub>16</sub>	21 <sup>15</sup> / <sub>16</sub>	2 <sup>15</sup> / <sub>16</sub>	61 <sup>15</sup> / <sub>16</sub>	16 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	169 <sup>15</sup> / <sub>16</sub>	21 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	32
32	41 <sup>1</sup> / <sub>2</sub>	6	10 <sup>1</sup> / <sub>8</sub>	20 <sup>3</sup> / <sub>4</sub>	31 <sup>1</sup> / <sub>8</sub>	25	391 <sup>15</sup> / <sub>16</sub>	241 <sup>15</sup> / <sub>16</sub>	13 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>4</sub>	201 <sup>15</sup> / <sub>16</sub>	241 <sup>15</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>2</sub>	41 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>16</sub>	21 <sup>1</sup> / <sub>2</sub>	8 <sup>5</sup> / <sub>8</sub>	411 <sup>15</sup> / <sub>16</sub>	21 <sup>15</sup> / <sub>16</sub>	2 <sup>15</sup> / <sub>16</sub>	61 <sup>15</sup> / <sub>16</sub>	16 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	169 <sup>15</sup> / <sub>16</sub>	21 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	34
34	43	6 <sup>1</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>4</sub>	22	34	26 <sup>7</sup> / <sub>8</sub>	421 <sup>15</sup> / <sub>16</sub>	281 <sup>15</sup> / <sub>16</sub>	14 <sup>1</sup> / <sub>2</sub>	15	36	40 <sup>1</sup> / <sub>2</sub>	42 <sup>1</sup> / <sub>2</sub>	47 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>16</sub>	21 <sup>1</sup> / <sub>2</sub>	8 <sup>5</sup> / <sub>8</sub>	471 <sup>15</sup> / <sub>16</sub>	21 <sup>15</sup> / <sub>16</sub>	2 <sup>15</sup> / <sub>16</sub>	61 <sup>15</sup> / <sub>16</sub>	16 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	169 <sup>15</sup> / <sub>16</sub>	21 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	36
36	45 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>2</sub>	12	23 <sup>1</sup> / <sub>4</sub>	36	29 <sup>1</sup> / <sub>4</sub>	421 <sup>15</sup> / <sub>16</sub>	281 <sup>15</sup> / <sub>16</sub>	14 <sup>1</sup> / <sub>2</sub>	15	36	40 <sup>1</sup> / <sub>2</sub>	42 <sup>1</sup> / <sub>2</sub>	47 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>16</sub>	21 <sup>1</sup> / <sub>2</sub>	8 <sup>5</sup> / <sub>8</sub>	471 <sup>15</sup> / <sub>16</sub>	21 <sup>15</sup> / <sub>16</sub>	2 <sup>15</sup> / <sub>16</sub>	61 <sup>15</sup> / <sub>16</sub>	16 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	169 <sup>15</sup> / <sub>16</sub>	21 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	38
42	56	7	14	27	42	34	421 <sup>15</sup> / <sub>16</sub>	281 <sup>15</sup> / <sub>16</sub>	14 <sup>1</sup> / <sub>2</sub>	15	36	40 <sup>1</sup> / <sub>2</sub>	42 <sup>1</sup> / <sub>2</sub>	47 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>16</sub>	21 <sup>1</sup> / <sub>2</sub>	8 <sup>5</sup> / <sub>8</sub>	471 <sup>15</sup> / <sub>16</sub>	21 <sup>15</sup> / <sub>16</sub>	2 <sup>15</sup> / <sub>16</sub>	61 <sup>15</sup> / <sub>16</sub>	16 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	169 <sup>15</sup> / <sub>16</sub>	21 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	40

D and R dimensions represent opening through capital.



## Additional Installation Details

### To Erect Balustrade and Porch Rail with Union Metal Columns



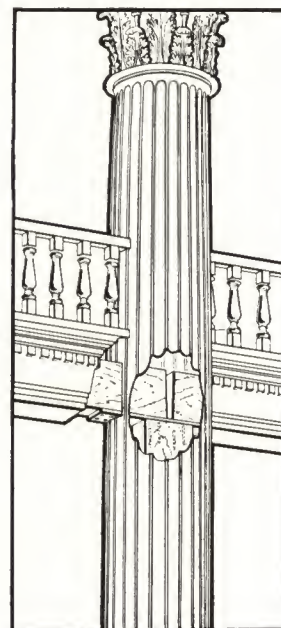
Cut ends of rail to fit the flutes in column, using care to make length of rail exact distance between columns at point somewhat above the final resting point. The taper of the columns will admit the rail, and permit it to be forced down to the proper position. The steel flutes will then hold the rail secure.

To prevent lower rail and balustrade being raised after setting, block may be nailed between lower rail and floor.

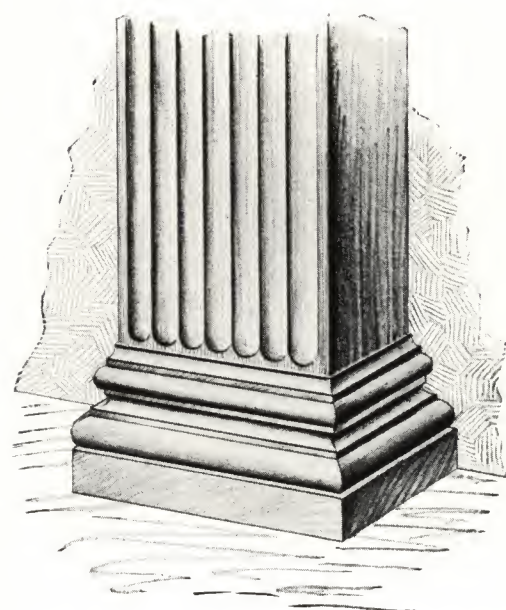
Where extremely heavy weights are to be suspended, cut a section out of the steel columns at the proper heights, as indicated on architect's plans. This admits the balcony floor supporting members into the steel columns and the weight is supported by timbers (6 x 6 inches or 8 x 8 inches, etc.) as shown in drawing. Contractor inserts supporting timber when columns are being erected.

*Alternative:* When abnormally heavy weights are to be suspended by the whole column, it is customary to run a heavy timber (8 x 8 inches or 10 x 10 inches, etc.) from bottom to top. If balcony is to be suspended, cut section out of column at specified height. Balcony supporting joists enter through this opening and are mortised into the sides of the upright supporting timber.

Awning hooks and fixtures may be easily attached with Diamond Twin Bolts. These bolts are standard and available at local hardware stores.



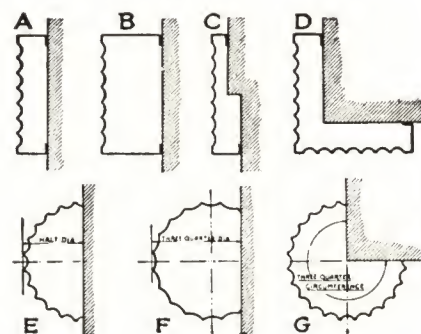
## Pilasters and Odd Shapes



Detail of bottom of Pilaster showing stopped flute and the fitting to cast iron base.

Flat pilasters, corner pilasters, half round columns and three-quarter round columns are made in sizes to match the different designs in this catalog.

In ordering pilasters specify: whether pilaster face shall be tapered to match columns, or whether pilaster face shall be straight from top to bottom. If ordered straight an extra cost applies. Always specify returns of pilasters in inches.



### NOTES

1. Unless otherwise ordered the bottom and top faces of pilasters will be furnished the same as the bottom and top diameters of columns, in which case the pilaster bases and capitals will line up with column bases and capitals.
2. All Union Metal Pilasters are fluted on the front faces to match columns, but are not fluted on the returns or projections unless specifically ordered. Fluted returns (projections) entail extra cost.
3. Returns when less than quarter are not tapered; when quarter or greater they are tapered.





C. S. DANGLER RESIDENCE, SHAKER HEIGHTS, OHIO. *H. B. Burdick, Architect.* Four 18' Design No. 230 Columns with 4 Pilasters to match; Two Design No. 240 Columns, height 8'-6" with 2 Pilasters to match.



Six Union Metal Columns, Roman Doric Type, Design No. 246 beautify the Sigma Phi Epsilon Fraternity House, Corvallis, Oregon. *Freeman & Strubble, Architects—Salem, Oregon.* *McFadden & Swain, Contractors—Corvallis, Oregon.*





HARTFORD MORTUARY, EL PASO, TEXAS. O. H. Thorman, Architect.  
Fourteen Union Metal Columns 16" x 16'-10", Design No. 237.



CLIFTON HIGH SCHOOL, CLIFTON, N. J. 4 Union Metal Columns Design No. 213 (Temple of the Winds). Height, 34'-10" x 42" diameter; 2 Pilasters to match. Architects, Lee & Hewitt, New York City and Patterson, N. J.



FRANK HILL RESIDENCE, LEXINGTON, KENTUCKY. Columns used are Design No. 237.





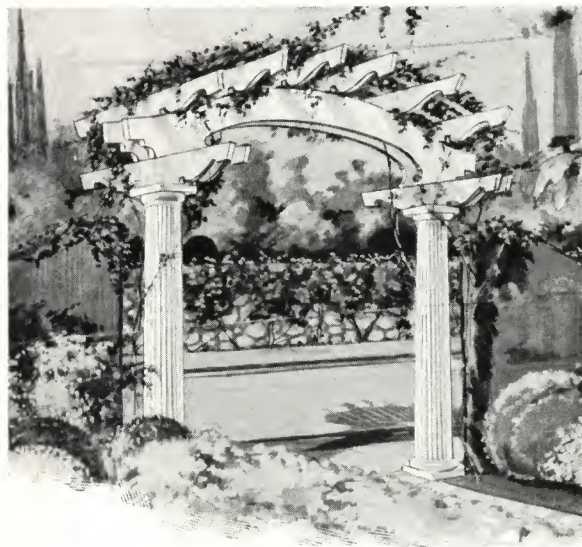
C. F. BLACKMAN RESIDENCE, PAINESVILLE, OHIO. Columns used are Design No. 240.



FIRE STATION, FT. WAYNE, INDIANA.  
*Pohlmeyer and Pohlmeyer, Architects.*  
Union Metal Columns and Pilasters,  
Design No. 240 used.



# WEATHERPROOF METAL PERGOLAS



**TWO COLUMN GATEWAY ARCH DESIGN No. 52**

Specifications: Two Union Metal Columns, Design 240, Modern Doric, 10" Base Diameter, 8" Top Diameter, 7' high. Wood beams 2" x 10", curved top 2" x 10", top rafters 2" x 6", lath 1" x 2".

For full enjoyment of grounds and garden, a pergola, rose screen or arbor is essential. It lends the needed contrast to solid masses of shrubbery and foliage.

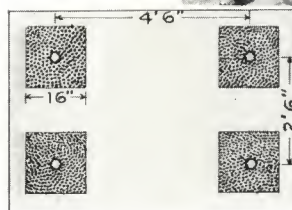
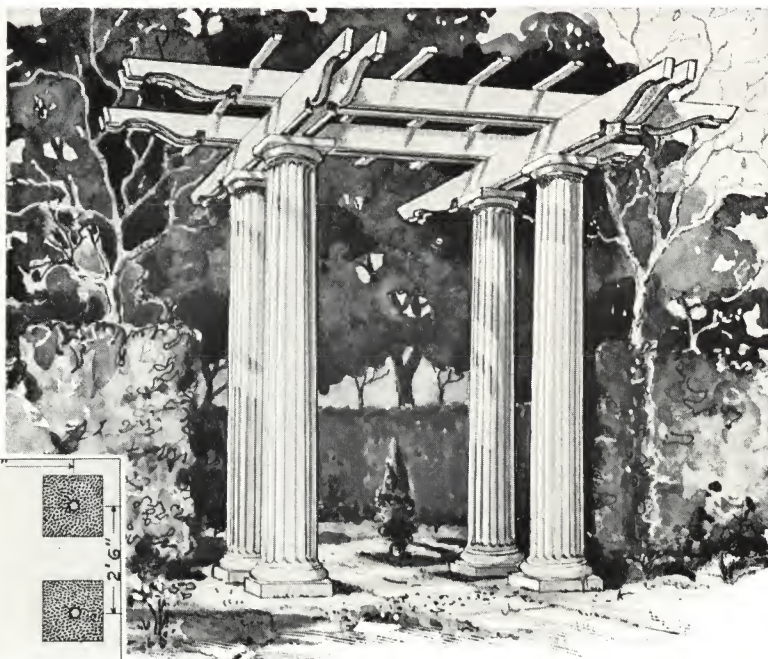
A pergola often serves as a retreat, a vine-covered bower. Frequently it leads off into the lawn, sometimes to the garage: again it enhances the entrance to the garden.

The reason you need a Union Metal Weatherproof Pergola is perhaps best answered by a statement from W. A. Natorp Company, Landscape Gardeners and Engineers, Cincinnati. "Our great trouble in using the wooden posts in the past has been, that when we had really achieved the beautiful effects of flowering vines and roses, the wood posts started to decay at the base, which necessitated partially destroying the vines in order to repair these posts. This condition has been entirely eliminated with the Union Metal Columns. The pergola and other garden features are now clothed in beauty to last indefinitely."

## CONSTRUCTION DETAILS

The value of a pergola, rose screen or trellis depends upon its permanence and ease of maintenance. Union Metal Columns offer a positive solution. Enduring steel columns that will not split nor rot are not affected by exposure to the overfriendly sun above nor damp ground and cement foundations below.

Full detail plans can be supplied with each design of pergola or gateway so that superstructure can be easily assembled by your local lumber company, carpenter or other available supply. In these plans intermediate rafters are bolted to beams. Anchor rods extend from concrete foundation through the center of the steel columns and tie directly into the supporting top beams. Such assembly guarantees permanence and ease of maintenance. Note: Limited space allows us to illustrate only two gateway pergolas. Many other designs are available in four, six and eight column structures. These are available upon request.



Foundation Plan

**FOUR COLUMN GATEWAY PERGOLA DESIGN No. 51**

Specifications: Four Union Metal Columns, Design 240, Modern Doric, 10" Base Diameter, 8" Top Diameter, 7' high. Wood beams 2" x 8", rafters 2" x 6", lath 1" x 2".



## EXTERIOR LIGHTING FIXTURES

Many grounds lend themselves to still further decoration by the tasteful use of lighting units. In addition, exterior lighting lends security and protection to the property where it is installed. Statistics show light to be one of the most effective nighttime police units and an exceptionally economical one as well. On this page are shown a group of Union Metal Exterior Lighting Fixtures adaptable to many usages: Gateway newels and brackets, entrance standards, driveway lighting and general grounds lighting units are shown. These are only a few of hundreds of designs available, and upon request catalogs descriptive of lighting standards only will be furnished.

Union Metal Exterior Lighting Standards not only add protection and nighttime beauty but in addition are so designed that their daytime appearance gives beauty and ornamentation to their surroundings.



Sun Dials, Bird Baths, Drinking Fountains and Flower Bowls are a few of the special garden fixtures available in the complete Union Metal line. Information on any of this equipment is available without obligation of any kind. Make it a point to obtain your copy of each of our catalogs as these will be instrumental in solving landscaping problems.



Design 3045 with G. E. Form 13 Novalux unit and 144 globe. Base diameter 16". Height overall 8' 0".



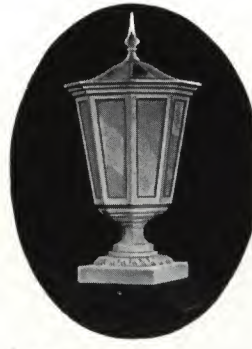
Design 1649 with octagonal Gothic lantern. Base dia. 16". Height overall 8' 2 1/2".



Design 723—1 light. Base 18" square, globe 16" dia., standard height overall 6' 9".



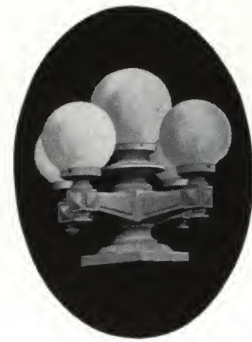
Design 1248—1 light, 10" Globe. Wall plate 4" x 9".



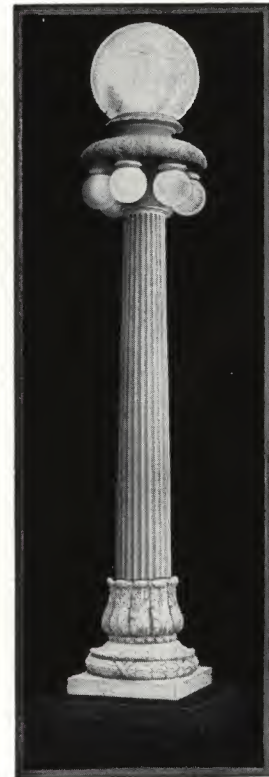
Design 864—Lantern Newel Base 11" square. Height overall 36".



Design 766—16" Globe. Base member 18" square.



Design 823—3 lights. Design 696—5 lights. Base 11" sq. 12" top globe, 10" side globes.



Design 735—7 lights. Base 18" square. Top globe 18" diameter, bottom globes 6" diameter. Standard height overall 9' 6".



**FLUTED STEEL PRODUCTS**



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